Chapter 2.7 WETLANDS PROGRAM INITIATIVES

Virginia's Wetlands

Wetlands are lands transitioning between terrestrial and deep-water habitats where the water table is usually at or near the land surface or where the land is covered by shallow water (Cowardin and others, 1979). Virginia has many different types of wetlands. Salt marshes include the extensive estuarine wetlands along the Chesapeake Bay that are characterized by vegetation tolerant of brackish to salty water. Other tidal marshes include estuarine wetlands located along freshwater parts of tidal rivers. Interdunal swales are topographic depressions among sand dunes on the Atlantic coast that contain palustrine emergent or scrub-shrub wetlands. Virginia's Atlantic white cedar swamps, red maple swamps, and cypress-tupelo swamps and its nontidal flood-plain forests are palustrine forested wetlands that have seasonally occurring standing water and flood-tolerant trees. Pocosins are palustrine scrub-shrub wetlands that are slightly elevated above the surrounding landscape and have flat topography and poor natural drainage. Virginia's bogs, fens, and wet meadows are palustrine emergent wetlands that are often underlain by organic soils.

Wetlands occupy approximately 4 percent of Virginia's landmass (Dahl, 1990). Based on the United States Fish and Wildlife Service National Wetlands Inventory mapping completed to date, vegetated palustrine wetlands cover approximately 1,075,443 acres of Virginia, and are by far the most abundant type of wetland in Virginia; estuarine wetlands cover 190,996 acres; lacustrine wetlands 193 acres; and riverine wetlands 380 acres (Hershner et al., 2000). In addition, isolated wetlands, i.e. those wetlands occurring in depressions or fed by groundwater, with no surface water connection to other state waters, account for anywhere from 179,849 to 411, 246 acres, depending on the method used to estimate these areas (Hershner et al., 2000).

Virginia includes five physiographic provinces: the Coastal Plain, Piedmont, Blue Ridge, Valley and Ridge, and Appalachian Plateaus. Each province is characterized by geologic features, landforms, and soils that directly affects the hydrology of wetlands. About 72 percent of the wetland area in Virginia, including all the estuarine wetlands and most of the large nontidal wetlands, are in the Coastal Plain (Tiner and Finn, 1986). Extensive estuarine wetlands have developed in low-lying areas along the shores of the Chesapeake Bay and its tributaries and behind the barrier beaches of the Atlantic coast. Palustrine wetlands are distributed throughout the State and are located primarily in bottom lands and in flood plains along stream channels, especially in headwater areas. About 22 percent of the wetlands in Virginia are in the Piedmont, and most of the remaining wetland area is in the Appalachian Plateaus (Tiner and Finn, 1986; Harlow and LeCain, 1991).

Virginia has experienced great losses of wetlands during its development. In the 1780's, wetlands covered about 1,849,000 acres (more than 7 percent) of Virginia (Dahl, 1990). By the mid-1980's, when permits began to be required for most impacts to wetlands, about 1,075,000 wetland acres remained in Virginia -- a loss of about 42 percent in 200 years (Dahl, 1990). Agriculture, industrial and urban development, and recreation have led to the draining, dredging and ditching, filling, diking, and damming of wetlands in Virginia. According to a Chesapeake Bay Foundation fact sheet (2001), Virginia lost more than 770,000 acres of wetlands, for an annual loss of 3,870 acres, during the 200-year period from the 1780s to the 1980s. From 1982 to 1989, Virginia lost more than 17,800 acres of its Chesapeake Bay watershed wetlands at an annual loss of 2,500 acres. While the most recent data have not been finalized, most experts agree that significant annual wetland losses continued during the 1990s. Wetland trends for the Norfolk/Hampton region of Virginia indicate a loss of about 4,800 acres of vegetated wetlands between 1982 and 1989/90 (Tiner and Foulis, 1994). Further, during 1998 and 1999, due to the Tulloch court decision, more than 2,500 acres of non-tidal wetlands in the tidewater area of Virginia were ditched an drained for development, circumventing permitting and compensation requirements. In addition, due to the 1998 Wilson decision, over 70 acres of isolated wetlands were filled without permitting or comepensation between 1998 and 2000. These wetland losses have been recognized as being potentially detrimental to Virginia's environment, and have led to the 2000 Virginia General Assembly establishing a state wetland program with authority independent from federal wetlands permitting under the Clean Water Act.

The Virginia Department of Environmental Quality is currently working with the Virginia Institute of Marine Sciences, under an EPA State Wetlands Grant, to devise a data reporting system to track wetlands losses and gains by each major watershed. This system, which will utilize information from the regulatory databasesat DEQ and VMRC, and will also account for gains in wetland acreage through voluntary

programs, should be in place by FY 04. The next wetland status and trends update will utilize that database.

Wetlands Definitions

Wetlands are defined in different ways depending on the regulatory or policy usage, but all wetlands have in common a seasonal pattern of hydrology or continuous inundation, characteristic hydric soils, and vegetation adapted to growing under saturated condition. The Wetlands Act of 1972 (Title 62.1 of the Code of Virginia) defines tidal wetlands for the purposes of protecting the resource and regulating development. Under this definition, wetlands are found in the 29 counties and 17 cities that comprise Tidewater, Virginia. Specifically, vegetated wetlands are defined as "all land lying between and contiguous to mean low water and an elevation above mean low water equal to the factor 1.5 times the mean tide range at the site of the proposed project in the county, city or town in question," and on which are growing one or more of 37 specified species of wetlands vegetation. Non-vegetated wetlands are defined as all other lands between mean low water and mean high water. The Act does not include a definition for non-tidal wetlands. Further, it does not include all lands which are considered to be wetlands under the federal definition, seasonally tidal areas included. Although the Wetlands Act was initially limited to vegetated tidal wetlands, subsequent amendments included two discrete areas subject to wind tides along the North Landing River and Back Bay in southeastern Virginia.

The definition of wetlands contained in the DEQ's Wetlands Policy is as follows: "The wetlands of the Commonwealth, including marshes, swamps, bogs and other low-lying areas, which during some period of the year will be covered in part by natural non-flood waters, are unique, valuable and an irreplaceable natural resource." This definition was modified and included in the Virginia Water Protection Permit (VWPP) regulation (9 VAC 25-210-10) as follows, and parallels the federal definition of wetlands: "Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support and, under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas."

Wetlands Legislation

Development activities in wetlands in Virginia are regulated by the Corps of Engineers through Section 404 of the Clean Water Act; the Department of Environmental Quality, through the Virginia Water Protection Permit and Section 401 of the Clean Water Act; the Virginia Marine Resources Commission and local Wetland Boards, through the Virginia Tidal Wetlands Act of 1972.

Tidal Wetlands Act

The Virginia Tidal Wetlands Act of 1972 is codified in Title 28.2, Chapter 13, Code of Virginia, and is administered by the Virginia Marine Resources Commission (VMRC). The Act authorizes local governments to establish local wetlands boards which exercise jurisdiction and issue permits for wetlands development, subject to adoption of a model wetlands zoning ordinance. While most Tidewater localities have wetlands boards, in those areas without boards, permits for wetlands development must be obtained from VMRC. The Commission reviews all decisions made by the local boards and has the authority to modify, remand, or reverse those decisions. The Act also requires the Virginia Institute of Marine Science (VIMS) to maintain an inventory of vegetated wetlands and provide advice and assistance to the VMRC on projects and on the development of wetland guidelines. The guidelines describe the values of each wetland community type and provide ranking according to the values.

Chesapeake Bay Preservation Act

The Chesapeake Bay Preservation Act created the Chesapeake Bay Local Assistance Department, whose function is to protect water quality and the integrity of the Chesapeake Bay through the creation of Chesapeake Bay Preservation Areas (CBPA) via local government ordinances. These preservation areas serve to restrict development in wetlands associated with free flowing permanent streams and their associated wetland areas, and establish buffer zones around these areas with certain development restrictions.. Each local

government within the coastal and piedmont areas of Virginia draining to the Bay have developed regulations and ordinances regarding development within CBPAs. The implementation of the regulations of this Act relies on local governments.

History of the Virginia Water Protection Permit (9 VAC 25-210)

The Virginia Water Protection Permit (VWPP) constitutes the state Water Quality Certification required under section 401 of the Clean Water Act. Activities for which a water quality certificate, and therefore a VWP permit, are required may include impacts to wetlands under Sections 402 and 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899, Federal Energy Regulatory Commission licensing, and other appropriate federal permits or licenses. The State Water Control Board may issue blanket Section 401 Certifications for classes of Corps of Engineers Nationwide and Regional Permits that have minimal environmental impact and meet the requirements of state law.

Regulations for the VWPP were first promulgated on May 20, 1992. These regulations replaced the existing 401 regulatory procedures contained in the State Water Control Board's Procedural Rule No. 3. The VWPP Regulations (9 VAC 25-210) define "surface waters", which are part of the definition of state waters, to include wetlands. This definition has closely followed the federal definition of "waters of the U.S.".

In 1996 and again in 1999, the Virginia General Assembly enacted legislation to encourage the use of Wetland Mitigation Banks. These “banks” were to be developed in accordance with federal guidance for the creation of wetland mitigation banks. Furthermore, the Virginia General Assembly enacted service area requirements for these banks that required any impacts compensated for through purchase of credits from the bank to be in the same or adjacent hydrologic unit within the same river watershed as the bank. The legislation also provided special provisions for linear transportation projects and projects for localities whose jurisdiction crosses multiple river watersheds.

The Great Dismal Swamp Wetland Mitigation Bank was the first bank in Virginia to be created subsequent to the issuance of the new Federal Guidance, and actually drains to Albemarle Sound in North Carolina. Since then, banks have been established in the following watersheds; Middle James River, Lower James River, Chickahominy River, Potomac River, the Dismal Swamp drainage, the Mattaponi River, and the Rappahannock River.

In 2000, the General Assembly amended Section 62.1-44 of the Code of Virginia, relating to non-tidal wetlands, to establish and implement policies and programs to achieve no net loss of existing wetland acreage and functions, as well as to develop voluntary and incentive-based programs that achieve a net resource gain in acreage and functions of wetlands. Although DEQ still acts as the state level Section 401 certification body, the General Assembly actions removed the dependence of the VWPP program on the issuance of a Corps permit. This enables DEQ to regulate activities such as excavation in wetlands and fill in isolated wetlands, which are not currently under federal jurisdiction pending the outcome of a series of court cases. The VWPP regulation (9 VAC 25-210-10) was significantly revised to reflect these statutory changes, some of which became effective on July 2000, with complete implementation on October 1, 2001.

In addition, the 2000 General Assembly directed DEQ to develop General Permits for classes of activities such as linear transportation projects, utility projects and development projects, to expedite the permitting process in Virginia while maintaining the same high level of environmental protection. The development of these General Permits took place with extensive input from the public through the establishment of a 30-person Technical Advisory Committee, and were implemented in October 1, 2001. Each General Permit has specific thresholds for use (1 acre for utility projects and 2 acres for transportation and development projects, plus a non activity specific permit for impacts less than 1/2 acre) and compensatory mitigation requirements, with a 45 day review and issuance time frame upon receipt of a complete registration statement.

Since first becoming a signatory state to the Chesapeake Bay Wetlands Policy in 1989, the Commonwealth of Virginia has remained committed to attaining a net gain in wetlands acreage and functions within the Chesapeake Bay drainage. The General Assembly’s actions in 2000 further confirm the Commonwealth’s commitment to these goals, through establishing a statutory commitment to a net resource

gain of non-tidal wetlands through voluntary programs.

Coordination of Activities

In addition to the regulatory agencies, several state resource agencies are involved in reviewing activities for which VWP permits are required. . Among these agencies are the Department of Game and Inland Fisheries and the Department of Conservation and Recreation's Division of Natural Heritage. These two agencies have an interest in aquatic or wetland-dependent species and their habitat. Also consulted is the Department of Health. Input is sought from these agencies through the permit application clearinghouse administered by the VMRC. Permitting activities are also coordinated with these agencies during cooperative site visits and periodic Joint Permit Application meetings sponsored by the Corps of Engineers.

The actions taken in 2000 by the Virginia General Assembly included changes within DEQ that served to streamline the permitting process through more predictable review of permit applications within specified time frames, and the ability to modify permits for minor changes without resubmitting an application. Additionally, the General Assembly requested that DEQ seek a State Programmatic General Permit (SPGP) from the Corps of Engineers by July 2002, which will lead to a tiered system for the review and issuance of permits for wetland impacts in the Commonwealth, allowing the best use of resources between the Corps and DEQ. The Corps SPGP-01 became effective on November 1, 2002.

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